

WHAT IS CLAIMED IS:

1. An imaging device comprising:
  - an image capturing unit;
  - 5 a first imaging control unit that has the image capturing unit execute moving picture imaging;
  - a first recording control unit that records in a memory moving picture data obtained through the moving picture imaging by the first imaging control unit;
  - 10 a recording instruction unit that instructs to record a still picture;
  - a still picture acquisition unit that acquires, when recording of a still picture is instructed by the recording instruction unit during execution of the moving picture imaging by the first imaging control unit, still picture data at the timing instructed;
  - 15 a second recording control unit that records in a memory the still picture data acquired by the still picture acquisition unit; and
  - a third recording control unit that records in a memory the still picture data acquired by the still picture acquisition unit as index image data of the moving picture data recorded in the memory by the first
  - 20 recording control unit.
2. An imaging device according to claim 1, further comprising a second imaging control unit that has the image capturing unit execute still picture imaging, wherein

the recording instruction unit instructs still picture imaging and still picture recording,

the second imaging control unit has the imaging unit execute still picture imaging when the recording instruction unit instructs still picture imaging and still picture recording, and

the still picture acquisition unit acquires still picture data obtained through still picture imaging by the second imaging control unit when the recording instruction unit instructs still picture imaging and still picture recording.

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3. An imaging device according to claim 1, wherein, when the recording instruction unit instructs still picture recording, the still picture acquisition unit acquires still picture data at a timing of the instruction from among moving picture data obtained through the moving picture imaging by the first imaging control unit.

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4. An imaging device according to claim 1, further comprising:  
a still picture imaging unit that captures still pictures, wherein the recording instruction unit instructs still picture imaging and still picture recording, and

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a third imaging control unit that has the still picture imaging unit execute still picture imaging when the recording instruction unit instructs still picture imaging and still picture recording, wherein the still picture acquisition unit acquires still picture data obtained through the still

picture imaging by the third imaging control unit when the recording instruction unit instructs still picture imaging and still picture recording.

5        5.        An imaging device according to claim 1, further comprising a size reduction unit that reduces a picture size of still picture data acquired by the still picture acquisition unit, wherein the third recording control unit records still picture data whose picture size is reduced by the size reduction unit in the memory as index picture data of the moving picture data.

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6.        An imaging device according to claim 1, wherein the third recording control unit records in the memory still picture data acquired by the still picture acquisition unit in correlation to the moving picture data.

15        7.        An imaging device according to claim 6, further comprising a moving picture file creation unit that creates a moving picture file based on moving picture data acquired through the moving picture imaging by the first imaging control unit, wherein

the first recording control unit records in the memory a moving picture file created by the moving picture file creation unit, and

20        the third recording control unit records in the memory still picture data acquired by the still picture acquisition unit as accompanying data of the moving picture file that is recorded in the memory by the first recording control unit.

8. An imaging device according to claim 1, wherein the third recording control unit records in the memory still picture data acquired by the still picture acquisition unit as head picture data of the moving picture data that is recorded in the memory by the first recording control unit.

9. An imaging device according to claim 1, further comprising an imaging instruction unit that instructs moving picture imaging, wherein

10 the first imaging control unit has the imaging unit execute moving picture imaging when the imaging instruction unit instructs the moving picture imaging.

10. An imaging device according to claim 9, wherein the third recording control unit records in the memory first still picture data acquired by the still picture acquisition unit after the imaging instruction unit instructs the moving picture imaging as index picture data of the moving picture data.

11. An imaging device according to claim 1, wherein, when the recording instruction unit instructs still picture imaging a plurality of times during execution of the moving picture imaging by the first imaging control unit, the still picture acquisition unit acquires a plurality of still picture data at timings of the instructions,

the second recording control unit records in the memory the plurality of still picture data acquired by the still picture acquisition unit, and

the third recording control unit records in the memory the plurality of still picture data acquired by the still picture acquisition unit as index picture data of the moving picture data.

12. An imaging device according to claim 1, further comprising a judging unit that judges whether the recording instruction unit instructs still picture imaging during execution of the moving picture imaging by the first imaging control unit, wherein

the third recording control unit records in the memory head picture data of moving picture data recorded in the memory by the first recording control unit as index picture data of the moving picture data, when the judging unit judges that still picture imaging is not instructed.

13. An imaging device according to claim 1, further comprising an index picture reproducing unit that reproduces still picture data that is recorded as index picture data in the memory by the third recording control unit.

14. An imaging device according to claim 13, wherein the index picture reproducing unit includes a unit that reproduces a plurality of still

picture data recorded in the memory as index picture data by the third recording control unit, and further comprising

a selection unit that selects desired still picture data among the plurality of still picture data reproduced by the index picture reproducing unit, and

a moving picture reproducing unit that reproduces moving picture data corresponding to the still picture data selected by the selection unit.

15. An imaging device comprising:

10 an image capturing unit;

a first imaging control unit that has the image capturing unit execute moving picture imaging;

a first recording control unit that records in a memory moving picture data obtained through the moving picture imaging by the first imaging control unit;

15 a recording instruction unit that instructs to record a still picture;

a still picture acquisition unit that acquires, when recording of a still picture is instructed by the recording instruction unit during execution of the moving picture imaging by the first imaging control unit, still picture data at the timing instructed;

a second recording control unit that records in a memory the still picture data acquired by the still picture acquisition unit;

a third recording control unit that records timing information that specifies the timing instructed in correlation to the moving picture data

when recording of a still picture is instructed by the recording instruction unit during execution of the moving picture imaging by the first imaging control unit;

5 a still picture extracting unit that extracts, based on the timing information recorded in correlation to the moving picture data in the memory, from the moving picture data the still picture data at the timing instructed to record the still picture; and

an index image reproduction unit that reproduces the still picture data extracted by the still picture extracting unit as index image data of  
10 the moving picture data.

16. An imaging device according to claim 15, further comprising a second imaging control unit that has the image capturing unit execute still picture imaging, wherein

15 the recording instruction unit instructs still picture imaging and still picture recording,

the second imaging control unit has the imaging unit execute still picture imaging when the recording instruction unit instructs still picture imaging and still picture recording, and

20 the still picture acquisition unit acquires still picture data obtained through the still picture imaging by the second imaging control unit when the recording instruction unit instructs still picture imaging and still picture recording.

17. An imaging device according to claim 15, wherein the timing information is information indicative of the number of picture frames.

18. An imaging device according to claim 15, wherein the timing  
5 information is information indicative of an elapsed time from the time the moving picture imaging is started until the still picture imaging is instructed.

19. An imaging device comprising:  
10 an image capturing unit;  
a first imaging control unit that has the image capturing unit execute moving picture imaging;  
an imaging instruction unit that instructs still picture imaging;  
a second imaging control unit that has the image capturing unit  
15 execute still picture imaging when imaging of a still picture is instructed by the imaging instruction unit during execution of the moving picture imaging by the first imaging control unit;  
a recording control unit that records in a memory correlating moving picture data obtained through the moving picture imaging by the  
20 first imaging control unit and still picture data obtained through the still picture imaging by the second imaging control unit to each other; and  
an index image reproduction unit that reproduces the still picture data recorded in the memory in correlation to the moving picture data as index image data of the moving picture data.

20. An imaging device comprising:

image capturing means;

first imaging control means for having the image capturing means

5 execute moving picture imaging;

first recording control means for recording in a memory moving

picture data obtained through the moving picture imaging by the first

imaging control means;

recording instruction means for instructing to record a still picture;

10 still picture acquisition means for acquiring, when the recording of

a still picture is instructed by the recording instruction means during

execution of the moving picture imaging by the first imaging control

means, still picture data at the timing instructed;

second recording control means for recording in a memory the still

15 picture data acquired by the still picture acquisition means; and

third recording control means for recording in the memory the still

picture data acquired by the still picture acquisition means as index image

data of the moving picture data recorded in the memory by the first

recording control means.

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21. An imaging method comprising:

a step of having an image capturing unit execute moving picture

imaging;

a step of acquiring, when recording of a still picture is instructed during execution of the moving picture imaging, still picture data at a timing instructed;

a step of recording in a memory moving picture data obtained  
5 through the moving picture imaging and the still picture data acquired;  
and

a step of recording in a memory the still picture data acquired as index image data of the moving picture data recorded in the memory.

10           22.    A program to be executed by a computer of an imaging device,  
the program comprising:

a processing for having an image capturing unit execute moving picture imaging;

a processing for acquiring still picture data of the timing instructed  
15 when the recording of a still picture is instructed during execution of the moving picture imaging;

a processing for recording in the memory the moving picture data obtained through the moving picture imaging and the still picture data acquired; and

20           a processing for recording in the memory the still picture data acquired as index image data of the moving picture data recorded in the memory.